

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

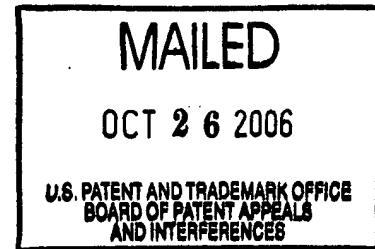
## UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

*Ex parte* BERT BEOHLER,  
JEAN-MARIE CLEMENT, PETRA TAMARA GIESEN  
AND MARC ROSE

Appeal No. 2006-2736  
Application No. 10/038,167

HEARD: Oct. 18, 2006



Before HAIRSTON, BARRY, and BLANKENSHIP, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

A patent examiner rejected claims 1-9. The appellants appeal therefrom under 35 U.S.C. § 134(a). We affirm.

#### I. BACKGROUND

The invention at issue on appeal displays medical images. Computed tomography ("CT") and magnetic resonance tomography ("MR") are used to generate and visualize three-dimensional ("3D") medical data. The "clip plane" in such a 3D visualization can be rotated or displaced; an object being visualized can be rotated or zoomed inside a volume such as a human body. (Spec. at 1.)

Simultaneous actuation of a keyboard's alphanumeric key and its control, shift, or "Alt" key have been used to select the functions of rotating, displacing, and zooming. Alternatively, a mouse has been used to select icons corresponding to these functions. According to the appellants, however, such methods of selection are complicated and can require a user to shift his field of view from the object. (*Id.*)

In contrast, the appellants' invention enables a user to select functions while visualizing images. Upon detecting movement of a mouse, more specifically, the invention switches from one function to another to change the display of images. (*Id.* at 2.)

A further understanding of the invention can be achieved by reading the following claim.

1. A diagnostic device comprising:

an arrangement for generating raw data representing an object;

a computer supplied with said raw data for calculating image data from said raw data;

an imaging system connected to said computer and supplied with said image data for generating input signals from said image data;

an input device connected to said imaging system, and having a user-operable mouse;

a display unit connected to said imaging system and supplied with said image data for displaying an image containing said object dependent on said image data; and

said imaging system allowing influencing of the display of said image on said display unit by a plurality of different control functions respectively uniquely associated with different predetermined movement directions of said mouse, said input device having a detector which detects a movement of said mouse in one of a said plurality of predetermined directions and said imaging system selecting the control function uniquely associated with said one of said plurality of said predetermined directions detected by said detector, to alter the display of said image on said display unit.

Claims 1-4 and 9 stand rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,954,650 ("Saito") and U.S. Patent No. 6,461,298 ("Fenster"). Claim 5 stands rejected under § 103(a) as obvious over Saito; Fenster; and U.S. Patent No. 6,725,215 ("Yamamoto"). Claim 6 stands rejected under § 103(a) as obvious over Saito; Fenster; and U.S. Patent No. 6,259,382 ("Rosenberg"). Claims 7 and 8 stand rejected under § 103(a) as obvious over Saito; Fenster; and U.S. Patent No. 6,601,055 ("Roberts").

## II. OPINION

"When multiple claims subject to the same ground of rejection are argued as a group by appellant, the Board may select a single claim from the group of claims that are argued together to decide the appeal with respect to the group of claims as to the

ground of rejection on the basis of the selected claim alone. Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately." 37 C.F.R. § 41.37(c)(1)(vii) .

Here, the appellants argue claims 1-4 and 9, which are subject to the same ground of rejection, as a group. (Appeal Br.<sup>1</sup> at 6-12.) Although they refer to the limitations of claim 3 in their reply brief, (Reply Br. at 4-5), the appellants' attorney explained at oral hearing that this was not an argument for the separate patentability of claim 3.<sup>2</sup> To the contrary, he stipulated that claims 2-9 stand or fall with claim 1.

---

<sup>1</sup>We rely on and refer to the substitute appeal brief, in lieu of the original appeal brief, because the original was defective. The original appeal brief was not considered in deciding this appeal.

<sup>2</sup> Of course, "it is inappropriate for appellants to discuss in their reply brief matters not raised in . . . the principal brief[ ]. Reply briefs are to be used to reply to matter raised in the brief of the appellee." *Kaufman Company, Inc. v. Lantech, Inc.*, 807 F.2d 970, 973 n., 1 USPQ2d 1202, 1204 n. (Fed. Cir. 1986). "Considering an argument advanced for the first time in a reply brief . . . is not only unfair to an appellee . . . but also entails the risk of an improvident or ill-advised opinion on the legal issues tendered." *McBride v. Merrell Dow and Pharmaceuticals, Inc.*, 800 F.2d 1208, 1211 (D.C. Cir. 1986) (internal citations omitted).

"With this representation in mind, rather than reiterate the positions of the examiner or the appellants *in toto*, we focus on the point of contention therebetween." *Ex parte Morris*, No. 2005-0439, 2005 WL 4779247, at \*3 (Bd.Pat.App & Int. 2005). The examiner finds that in Fenster "[e]ach detected directional movement of the mouse (UP, UP/RIGHT, RIGHT, RIGHT/DOWN, DOWN, DOWN/LEFT, LEFT, AND LEFT/UP) has a corresponding different function associated with it (rotate on screen depiction UP, UP/RIGHT, RIGHT, RIGHT/DOWN, DOWN, DOWN/LEFT, LEFT, AND LEFT/UP respectively)." (Examiner's Answer at 20.) He further finds that "rotation around the X-axis, the Y-axis, or a combination of both, are separate control functions, uniquely associated with corresponding mouse events." (*Id.*) The appellants argue that "the different directions of movement result in the image on the display screen being rotated in different directions and/or around different axes, but these different appearances are basically the same calculation made with different inputs. . . ." (Reply Br. at 5.)

"In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the representative claim at issue to determine its scope. Second, we determine whether the construed claim would have been obvious." *Ex Parte Massingill*, No. 2003-0506, 2004 WL 1646421, at \*2 (Bd.Pat.App & Int. 2004).

#### A. CLAIM CONSTRUCTION

"Analysis begins with a key legal question — what is the invention claimed?"

*Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). In answering the question, "the PTO gives claims their 'broadest reasonable interpretation.'" *In re Bigio*, 381 F.3d 1320, 1324, 72 USPQ2d 1209, 1211 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1668 (Fed. Cir. 2000)). "Moreover, limitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)).

Here, claim 1 recites in pertinent part the following limitations: "said imaging system allowing influencing of the display of said image on said display unit by a plurality of different control functions respectively uniquely associated with different predetermined movement directions of said mouse. . . ." Giving the representative claim its broadest, reasonable construction, the limitations require changing the display of an image via different control functions respectively associated with different movement directions of a mouse.

#### B. OBVIOUSNESS DETERMINATION

"Having determined what subject matter is being claimed, the next inquiry is whether the subject matter would have been obvious." *Massingill*, at \*3. The question of obviousness is "based on underlying factual determinations including . . . what th[e] prior art teaches explicitly and inherently. . . ." *In re Zurko*, 258 F.3d 1379, 1383, 59 USPQ2d 1693, 1696 (Fed. Cir. 2001) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); *In re Dembicza*k, 175 F.3d 994, 998, 50 USPQ2d 1614, 1616 (Fed. Cir. 1999); *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995)). "'A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.'" *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, Fenster "relates to medical diagnostics and in particular to a method and system for constructing and displaying three-dimensional images." (Col. 1, ll. 22-24.) "Referring now to FIG. 1, a three-dimensional ultrasound imaging system in accordance with the present invention is shown and is generally indicated by reference numeral 20. The system 20 is capable of generating a three-dimensional ultrasound image of a target volume of a subject under examination. . . ." (Col. 3, ll. 52-57.) "The [system's]

computer 32 includes a keyboard (not shown), a monitor 36 with a display screen 36a and a graphical input device 38 such as a single button mouse. . . ." (Col. 4, ll. 7-10.)

"[D]igitized information . . . may be processed by a display module 92 in response to input received from graphical input device 38 so that a three-dimensional image of the target volume can be displayed on the screen 36a of the monitor 36 and manipulated. . . ." (Col. 5, ll. 34-41.) For example, "FIGS. 8a to 8c show the model and three-dimensional image within the main window display undergoing a rotation about a vertical axis as the graphical input device 38 is moved to drag the cursor across the main display window from mid-right to mid-left." (Col. 13, ll. 22-26.) For another example, "FIGS. 9a to 9c show the model and three-dimensional image undergoing a rotation about an axis, angled at about 30° to the horizontal and sloping up and to the right, as the graphical input device 38 is moved to drag the cursor across the main display window from top-left to bottom-right." (*Id.* at ll. 26-31.)

Because we agree with the examiner's finding that rotating an image about a vertical axis and rotating an image about a 30° axis constitute different control functions, we also agree with his finding that Fenster teaches changing the display of an image via different control functions respectively associated with different movement

directions of a mouse. Therefore, we affirm the rejection of claim 1 and of claims 2-4 and 9, which fall therewith.

Rather than arguing the rejection of claims 5-8 separately, the appellants rely on their aforementioned argument. (Appeal Br. at 12-13) Unpersuaded by this argument, we also affirm the rejections of these claims.

### III. CONCLUSION

In summary, the rejections of claims 1-9 under § 103(a) are affirmed.

"Any arguments or authorities not included in the brief or a reply brief filed pursuant to [37 C.F.R.] § 41.41 will be refused consideration by the Board, unless good cause is shown." 37 C.F.R. § 41.37(c)(1)(vii). Accordingly, our affirmance is based only on the arguments made in the briefs. Any arguments or authorities omitted therefrom are neither before us nor at issue but are considered waived. Cf. *In re Watts*, 354 F.3d 1362, 1367, 69 USPQ2d 1453, 1457 (Fed. Cir. 2004) ("[I]t is important that the applicant challenging a decision not be permitted to raise arguments on appeal that were not presented to the Board.") No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED



KENNETH W. HAIRSTON  
Administrative Patent Judge



LANCE LEONARD BARRY  
Administrative Patent Judge

BOARD OF PATENT  
APPEALS  
AND  
INTERFERENCES



HOWARD B. BLANKENSHIP  
Administrative Patent Judge

Schiff Hardin, L.L.P.  
Patent Department  
6600 Sears Tower  
Chicago, IL 60606-6473